

# PENNA

## Using insight from staff feedback - ACEmobile

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# What is the challenge?

- We are clinicians working with people with dementia
- Diagnosis major factor in psychological health of patients
- There is a big demand on services to screen with limited additional funding for staff/training
- Results in waiting list for NHS dementia services - impacts on patients

# What is the challenge?

- Cognitive testing central to diagnostic process
- Rate limiting step - few staff/low training level

## Challenge:

Maintain  
assessment  
quality

Meet patient  
need (service  
demand)



# A solution would require:

- Support clinicians to assess for dementia – **maintain quality**
- Support people with less experience of dementia/cognitive testing – **increasing capacity**
- Not require significant training – **limit cost**
- Would be acceptable to patients
- Support research – **improve measure over time**

# Technology offers a solution..

- Automates instructions (control administrator variance)
- Allows more complex tests (incorporate manual)
- Assist scoring of hard 'subjective' tests
- Automates reporting (less reliance on administrator knowledge)
- Can collect more complex data without relying on administrator competence (increased sensitivity)
- Routine collection of data for research to improve measure



- iPad based version of the Addenbrookes Cognitive Examination
- Feedback from patients and clinicians central to design process
- Released 2013 as a **free** tool for use
- Now have over **1,400 registered clinical sites** – worldwide (+25/month)

# ACEmobile – impact on quality

Clinical impact - improved quality.



ELSEVIER



CrossMark

Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring 10 (2018) 182-187

Alzheimer's  
&  
Dementia

Cognitive & Behavioral Assessment

Improving the quality of cognitive screening assessments: ACEmobile, an iPad-based version of the Addenbrooke's Cognitive Examination-III

# ACEmobile – impact on efficiency

- **Increased screening capacity** - e.g. primary care, non-specialist staff
- **Speed** - reduces assessment time by 20%
- **Safer data capture** - electronic report – facilitates integration into EHR



# ACEmobile – impact on cost

- 5 years availability for NHS services at **no cost** (504 UK clinical sites).
- Potential saving to NHS if services better able to assess in community – reduce referrals to memory clinic

# ACEmobile – impact on research

- 5,500 ACEmobile assessments collected - 5 million data points
- Data being used to improve the measure
- ACEmobile – capacity to support research going forward – development new measures
- ACEmobile – supports quality data collection for research studies

# ACEmobile - plans

- **ACEmobile v3** – new revised version for multiplatform (not just iPad)
- **Mini-ACEmobile** – for primary care screening
- **Increase user base** - ACEmobile Iceland and India

# ACEmobile – summary

1. ACEmobile embodies values of NHS – uses innovation to improve quality and efficiency and is economically ethical
2. ACEmobile adds significant value to both patients **and** health services. It has supported hundreds of clinicians for 5 years at no cost to NHS
3. The future of this project is strong – 3 years of sustainability/update funding secured, research infrastructure and aspiration for a continued FREE model.

The image features a tablet displaying the ACE-3 mobile application interface. The interface is titled "ACE-3 mobile" and "Assessment". It includes a sidebar with options: "login", "assessment", "reports", and "data management". The main screen shows "Patient / Participant Information:" with fields for "Name of Unique ID number", "Date of Birth" (format dd/mm/yyyy), "Years in education", and "No. of years (e.g. 8)". There are also fields for "Sex" (Male/Female) and "Handedness" (Left/Right), each with a "Continue" button. A large "FREE" banner is in the top left corner. To the right of the tablet is the "ACE mobile Dementia Assessment" logo.

FREE

ACE-3  
mobile

login  
assessment  
reports  
data management

Tap to select

Assessment

Patient / Participant Information:

Patient ID / Name:  
Name of Unique ID number

Date of Birth  
dd/mm/yyyy

Years in education  
No. of years (e.g. 8)

Sex  
Male Female

Handedness  
Left Right

Continue

ACE  
mobile  
Dementia Assessment

Designed by clinicians, for clinicians

[www.acemobile.org](http://www.acemobile.org)

Thank you  
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